Talk with Expectant Parents about Late Vitamin K Deficient Bleeding Among Infants

[Announcer] This program is presented by the Centers for Disease Control and Prevention.

In 2013, the Tennessee Department of Health, with assistance from the Centers for Disease Control and Prevention, investigated a cluster of vitamin K deficiency bleeding in infants. These infants had not received vitamin K at birth because their parents had chosen to opt out of the injection. Most of the infants had large intracranial bleeds. Parents of these infants, and other parents we talked to who also opted out of the vitamin K injection, did not know that the risk for vitamin K deficiency bleeding lasts for up to six months. Therefore, it's important to talk with your expectant parents about vitamin K.

Welcome to CDC Audio Rounds, I'm Dr. Lauren Marcewicz, a pediatrician with the Division of Blood Disorders, at CDC's National Center on Birth Defects and Developmental Disabilities. Infants are predisposed to have low vitamin K levels, resulting in low levels of vitamin K-dependent clotting factors and an increased risk for vitamin K deficiency bleeding.

Vitamin K deficiency bleeding is classified based on when the bleeding presents. Late vitamin K deficiency bleeding is the most concerning type. This bleeding occurs in previously healthy infants up to six months of age. Thirty to 60 percent of patients have intracranial bleeds. Warning signs, such as prior bleeds from other sites, are rare.

Fortunately, vitamin K deficiency bleeding is preventable. Since 1961, the American Academy of Pediatrics has recommended one dose of intramuscular vitamin K just after birth in order to prevent vitamin K deficiency bleeding. In order to encourage immediate bonding and contact between the infant and mother, vitamin K administration can be delayed up to six hours after birth.

Vitamin K injection at birth is highly effective at preventing vitamin K deficiency bleeding. The risk of developing vitamin K deficiency bleeding is 81 times greater in infants who do *not* receive the vitamin K injection when compared with those who do.

Vitamin K is safe. A study in the early 1990s found an association between vitamin K injection and childhood cancer, but this association has *not* been replicated in several studies since then. The American Academy of Pediatrics synthesized the evidence about vitamin K and cancer twice—in 1993 and again in 2003—and re-stated its recommendation for intramuscular injection both times. There is no evidence that vitamin K is associated with an increased risk for other adverse events.

The risk of vitamin K deficiency bleeding leading to severe bleeds is real, while the perceived risks of the vitamin K shot are not evidence-based. Provide reliable information to parents so they can make informed choices about their child's medical care, and protect their child from potentially devastating consequences. For more information, please visit www.cdc.gov/blooddisorders.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO.